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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,133	04/13/2000	Steven M. Swam	2316.1175US01	7533

23552 7590 04/10/2007  
MERCHANT & GOULD PC  
P.O. BOX 2903  
MINNEAPOLIS, MN 55402-0903

EXAMINER
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SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
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2614

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/549,133

Applicant(s)

SWAM ET AL.

Examiner

Ramnandan Singh

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,9,10,13-15,17-24,27,52, 53,55-59,61-63 and 70-76 is/are allowed.
- 6) ☒ Claim(s) 37-40, 42-43, 44-47,49-50, 51, 69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Rejection of Claims</u> .              |

**Continuation of Disposition of Claims:** Claims pending in the application are 1,3-5,9,10,13-15,17-24,27,37-40,42-47,49-53,55-59,61-63 and 69-76.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because Figures 4A and 4B do not have legends explaining the reference numerals used in the Figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in

the next Office action. The objection to the drawings will not be held in abeyance.

### ***Response to Arguments***

2. Applicant's arguments filed on Jan. 16, 2007 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 37-40, 42-43, 44-47, 49-51, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frazier et al [US 6,430,288 B1] in view of Dithie et al [US 4,821,150].

Regarding claim 37, Frazier et al teach a telecommunication component (i.e. **splitter assembly 10**), as shown in Fig. 1, comprising:  
a chassis (i.e. housing) defining a reference back plane;

an interface card mounted at the reference back plane of the chassis,  
the interface card including:

a circuit board (i.e. **a splitter circuit on a card**) positioned at an  
orientation [col. 3, lines 32-45; col. 6, lines 17-23];

a first cable connector mounted to the circuit board and positioned at  
the back plane for inputting twisted pair, mixed data and voice signals to  
the circuit board;

a second cable connector mounted to the circuit board and positioned  
at the back plane for inputting twisted pair, mixed data and voice signals to  
the circuit board; and

a third cable connector mounted to the circuit board and positioned at  
the back plane for inputting twisted pair, mixed data and voice signals to  
the circuit board [col. 6, lines 29-56; col. 2, lines 44-58; col. 3, lines 46-54].

Frazier et al do not teach one or more card edge connectors  
connected to the circuit board.

Duthie et al teach a card edge connector (52) connected to a circuit  
board ( known as a line card) (26) ,having a plurality of conductive

members (53), in a conventional fashion, for making proper connection when inserted into a mating receptacle connector [Fig. 2; col. 1, lines 34-45; col. 2, lines 7-35; col. 4, lines 11-26; col.3, lines 23-30; col. 5, lines 17-35; col. 2, lines 7-35; col. 5, line 67 to col. 7, line 5], wherein the card edge connector includes a group of normally closed contacts (i.e. male connector); and a group of normally open contacts (i.e. female connector); all of the normally open contacts being grouped separately from the normally closed contacts which is an inherent feature of card edge connectors. It is nevertheless a teaching to one of ordinary skill in the art to apply the same to other applications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Duthie et al et al with Frazer et al in order to use one or more card edge connectors of the circuit board to connect the splitter of Frazier et al to receive signals from a transmission system in telephonic communications [Duthie et al; col. 1, lines 5-20].

Although Frazier et al teach a splitter assembly (10) having a housing 12 and circuit board providing no specific orientation [Fig. 1; col. 2, lines 44-58], it would have been obvious to one of ordinary skill at the time the invention was made to use any orientation for the circuit board including perpendicular relative to the reference back plane to accommodate the splitters subject to circuit, system and design constraints.

Claims 44, 51, 69 are essentially similar to claim 34 and are rejected for the reasons stated above.

Regarding claim 38, Duthie et al teach a first card edge connector and a separate second card edge connector, the first card edge connector including the normally closed contacts (i.e. male connector) and the second card edge connector including the normally open contacts (i.e. female connector) [col. 5, lines 18-35; col. 5, line 67 to col. 6, line 34].

Regarding claim 39, although Frazier et al teach a splitter assembly (10) having a housing 12 and circuit board providing no specific orientation [Fig. 1; col. 2, lines 44-58], it would have been obvious to one of ordinary



skill at the time the invention was made to use any orientation for the circuit board relative to the reference back plane to accommodate the splitters subject to circuit, system and design constraints.

Regarding claim 40, Frazier et al also disclose the splitter assembly that includes a plurality of POTS splitter card that includes at least 24 POTS splitter [Abstract; col. 6, lines 29-61].

Regarding claims 42-43, 45-47, 49-50, the limitations are shown above .

### ***Allowable Subject Matter***

5. Claims 1, 3-5, 9-10, 13-14, 15, 17-24, 27, 52-53, 55-59, 61-63 and 70-76 are indicated allowable.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 recites a telecommunications component and limitations for the following: “ a splitter card having one or more card edge connectors that connect to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data and voice signals into the data signals and the voice signals.” The prior art of record does not teach these limitations in the context of the claim.

Therefore, claim 1 is indicated allowable.

Claims 15, 52-53, 57-59, 70, 73 and 76 are essentially similar to claim 1 and indicated allowable.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30):

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh  
Examiner  
Art Unit 2614

A handwritten signature in black ink, appearing to read 'RNP Singh', with a horizontal line drawn underneath it.